

REPLY TO DR. M. C. COOKE'S CRITICISM OF PAPER ON "VARIABILITY
OF SPHÆRIA QUERCUM, SZ."

BY. J. B. ELLIS.

In the last number of *Grevillia* the editor of that Journal makes some statements with regard to my paper on *Sphæria Quercum*, published in the Proceedings of the Academy of Natural Sciences of Philadelphia last March, which need correction. He says "It matters not that the sporidia vary in size and form, that in some (of the species) they should be obtuse, in others rather acute at the extremities, in some hyaline, in others deep brown." Dr. Cooke, who has examined the specimens, must have known that these various forms of sporidia instead of being characteristic of different species are all to be found in the same perithecium, the narrow and acute forms being in fact only young or imperfect. As to the sporidia being "hyaline in some and in others deep brown," the record in *Grevillea* contradicts that statement, so far at least as the species of C. and E. are concerned, *Melogramma Aceris* alone excepted; and even in this species my specimens have the sporidia hyaline. *S. eriostiga* is also said to have the sporidia brown and bisepate; but it is added that these were free spores, the sporidia actually observed in the asci being hyaline. In my previous paper I stated, and subsequent observation has confirmed the statement, that brown bisepate spores are found in *all* the different forms but as yet not in asci. They occur but sparingly it is true, but a careful and patient search is sure to reveal their presence. I wish here to amend my original statement so far as the color of the sporidia is concerned. In all fresh specimens examined, the sporidia are hyaline. Some specimens on *Quercus alba* and on *Vaccinium Pennsylvanicum*, both of which had been poisoned, have brown sporidia, but as the color may be due to the action of the poison, it will be safer to assume that the sporidia are hyaline till the examination of fresh and living specimens shall show them to be brown.

It is asked why twenty other species having similar sporidia were excluded from the list? Simply because I had not actually examined specimens of these species, and it was not intended to give mere opinion, but to state facts actually observed. As to

“ignoring all variations of internal structure” and “discarding all external features,” I am willing to let the specimens speak for themselves.¹

¹ I intended to add to the original paper a foot note, designating all the forms with perithecia not united in a stroma as *var. simplex*, but as no additions could be made after the article was in type, I was obliged to content myself with adding this note with pen and ink to the copies sent me for distribution.